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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,107	09/29/2003	Samuel M. Babb	10992052-3	2437

7590 05/31/2006

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
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Fort Collins, CO 80527-2400

EXAMINER
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NGO, HUNG V

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/674,107	<b>Applicant(s)</b> BABB ET AL.	
	<b>Examiner</b> Hung V. Ngo	<b>Art Unit</b> 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 53-113 is/are pending in the application.
- 4a) Of the above claim(s) 97-113 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 73-96 is/are allowed.
- 6) ☒ Claim(s) 53-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) *  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 53, 55-60, 63 are rejected under 35 U.S.C. 102(b) as being anticipated by Gale et al (US 5,796,583).

Re claim 53, Gale et al disclose a printed circuit board comprising:

a printed wiring board (16);

at least one component (20) mounted on said printed wiring board;

an EMI shield (42) conformingly disposed on surfaces of at least one region on the top and bottom of said printed circuit board (col. 4, lines 20-50); and

an electrically conductive spring clip (60) secured around an edge of said printed circuit board to electrically couple said EMI shield disposed on said top and bottom surfaces of said printed circuit board.

Re claim 55, wherein said EMI shield comprises a conductive coating and a dielectric coating interposed between said conductive coating and selected portions of each said printed circuit board region (col. 4, lines 40-50); and

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wherein said spring clip is secured round said printed circuit board edge so as to contact said conductive coating of said EMI shield disposed on said top and bottom of said printed circuit board (Fig 3).

Re claim 56, wherein said spring clip is a unitary device (Fig 3)

Re claim 57, wherein said spring clip is removably secured to said printed circuit board (Fig 3).

Re claim 58, wherein said spring clip is constructed and arranged to be manually secured to said printed board (Fig 3).

Re claim 59, wherein said EMI shield comprises: a conductive coating; and a dielectric coating interposed between said conductive coating and selected portions of each said printed circuit board region (col. 4, lines 40-50);

Re claim 60, wherein said one or more regions of said EMI shield are physically contiguous on each of the top and bottom sides of the printed circuit board (Fig 5).

Re claim 63, wherein said printed wiring board inherently having surface traces, wherein said dielectric coating and said surface traces are constructed and arranged such that said surface traces inherently have a desired characteristic impedance.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 54, 61, 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale et al in view of Chitwood et al.

The teaching of Gale et al as discussed above does not disclose top and bottom ground strips disposed on top and bottom surfaces of said printed wiring board proximate to an edge of said printed wiring board (re claim 54), a ground plane disposed in said printed wiring board and a plurality of vias each connected to said ground plane to at least one ground pad (re claim 61), a plurality of ground pad mounted in said printed wiring board so as to substantially surround the shielded connectors (re claim 62)

Chitwood et al disclose top and bottom ground strips (14) disposed on top and bottom surfaces of said printed wiring board proximate to an edge of said printed wiring board (re claim 54), a ground plane disposed in said printed wiring board (abstract) and a plurality of vias each inherently connected to said ground plane to at least one ground pad (Fig 1)(re claim 61), a plurality of ground pad (14) mounted in said printed wiring board so as to substantially surround the shielded connectors

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the top and bottom ground strips, ground plane, plurality of vias, ground pad with the board of Gale et al for the purpose of achieving isolation between the circuit card assembly and exterior magnetic influence.

Claims 64-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale et al.

The teaching of Gale et al as discussed above does not disclose method of forming dielectric or conductive coating

The presence of process limitations in product claims, which product does not otherwise patentably distinguish over prior art, cannot impart patentability to that product. In re Stephens 145 USPQ 656 (CCPA 1965).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Gale et al by employing method steps for intended purpose

#### ***Allowable Subject Matter***

Claims 73-96 are allowed.

The indicated allowability of claims 53-72 is withdrawn in view of the newly discovered reference(s) to Gale et al

#### ***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung V Ngo whose telephone number is (571) 272-1979. The examiner can normally be reached on Monday to Thursday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A Reichard can be reached on (571) 272-2800 EXT 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HVN  
May 25, 2006

*Hung V Ngo*

**HUNG V. NGO  
PRIMARY EXAMINER**